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TEACHER PERSISTENCE AS A PREDICTOR OF TEACHER COLLABORATION AND SCHOOL IMPROVEMENT INITIATIVES

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ABSTRACT

This study investigated the influence of teacher persistence on teacher collaboration and school improvement initiatives in Lupon West District, Davao Oriental, utilizing a non-experimental quantitative research design with a descriptive-correlational approach. A total of 175 public elementary school teachers were selected through simple random sampling, and modified, validated questionnaires were used for data collection. Results revealed that teacher participation in career development was generally moderately extensive, with professional growth emerging as the strongest indicator, while consistent effort, resilience, and student dedication required reinforcement. Teacher collaboration was also moderately extensive, particularly in resource-sharing and team participation, though constructive feedback remained underutilized. School improvement initiatives were extensively implemented, especially in leading projects and curriculum development, while professional development participation was only moderately evident. Correlation analysis confirmed significant positive relationships between teacher persistence and both teacher collaboration and school improvement, with professional growth showing the highest influence. Regression results further established that teacher persistence significantly predicted both outcomes, supporting Garmezy's (1961) Resilience Theory, Johnson et al.'s (1983) Social Interdependence Theory, and Lewin's (1947) Organizational Change Theory.

KEYWORDS: *Teacher Persistence; Teacher Collaboration; School Improvement; Resilience Theory; Educational Reform,; School Leadership*

INTRODUCTION

One problematic issue in teacher collaboration and school improvement initiatives is the variable level of engagement and commitment among teachers, which can significantly affect the outcomes of these efforts. Despite the recognized benefits of collaboration, such as improved teaching practices and student outcomes, achieving effective collaboration is often hindered by factors like time constraints, lack of administrative support, and conflicting teaching philosophies. These obstacles can lead to inconsistent participation, where some teachers might not fully engage in collaborative activities, thereby limiting the potential benefits. Furthermore, schools attempting to implement improvement initiatives often face resistance due to fear of change or increased workload, which can stifle the growth and adaptability of the educational environment. The efficacy of such initiatives is closely tied to the teachers' willingness and ability to collaborate, making it crucial to address these barriers effectively to foster a conducive atmosphere for meaningful educational reforms.

Given these complexities, there is a pressing necessity to conduct multiple analyses on the impact of teacher persistence on teacher collaboration and school improvement initiatives. Teacher persistence, characterized by dedication and resilience, could play a pivotal role in overcoming the aforementioned challenges by fostering a culture of commitment and continuous improvement among educators. By employing various analytical methods, such as regression analysis and ANOVA, researchers can elucidate the direct and indirect effects of teacher persistence on the dynamics of teacher collaboration and the success of school improvement efforts. This multi-faceted approach allows for a deeper understanding of how persistent behaviors influence the integration and sustainability of collaborative practices and reforms. It also helps identify specific areas where targeted interventions could support persistent teachers and enhance their impact on collaborative and improvement initiatives, thereby contributing to more effective and resilient educational environments.

Teacher collaboration and school improvement initiatives face distinct challenges across different regions, including the USA, UK, and Asia. Weddle et al. (2019) analyze the emotional toll of collaboration, noting that conflicting expectations can cause frustration and resentment among teachers, particularly when collaboration feels one-sided or excessively demanding. This emotional strain can impede effective teamwork and sustainable school improvements. Conversely, Shavard (2022) views teacher collaboration as crucial not only for school improvement but also as a key component of

ongoing professional development. He argues that when collaboration is well-integrated, it extends beyond mere performance metrics to address wider educational needs, such as individual student cases, thereby fostering teacher growth. Both studies emphasize the need for managing expectations and nurturing emotional well-being to make collaborative efforts sustainable and beneficial for professional development, calling for systemic changes to promote a more equitable and reciprocal framework for teacher collaboration in the U.S. educational landscape.

In the UK, Armstrong et al. (2021) identify that while school-to-school collaboration is promoted as a key strategy for improvement, its effectiveness is often hindered by inconsistencies in implementation and varying levels of commitment among schools. They note that the success of such collaborations depends heavily on the context and the capacity of schools to engage meaningfully. Similarly, Milner et al. (2020) discuss how policy discourses on teacher collaboration in post-crisis Europe, including the UK, have increasingly framed collaboration as a form of governance, which can create tensions between collaborative intentions and accountability pressures. This shift can lead to superficial collaboration driven more by compliance than by genuine professional learning, thereby limiting the potential impact on school improvement. Both studies emphasize the need for supportive structures and a shared purpose to overcome these challenges and realize the full benefits of collaborative efforts in enhancing educational outcomes.

The studies by Zeng and Day (2019) and Liu (2021) provide critical insights into the complexities of teacher collaboration and school improvement initiatives in Asia, particularly in Shanghai, China, and District A of Chengdu. Zeng and Day (2019) highlight the cultural and contextual tensions in collaborative teacher professional development, noting that while collaborative practices are encouraged, deeply ingrained hierarchical structures and traditional views on authority can hinder open communication and genuine collaboration among teachers in Shanghai. Similarly, Liu (2021) explores education groups in Chengdu as a strategy for school collaboration, highlighting challenges such as unequal power dynamics and stakeholder interactions. Both studies underline that, despite the growing recognition of teacher collaboration's importance for school improvement, cultural norms and structural inequalities often hinder the full effectiveness of these initiatives.

Moreover, the study by Balindong et al. (2024) highlights the challenges faced by school principals in Lanao Del Sur, Philippines, during the implementation of the School Improvement Plan (SIP), particularly noting the difficulties in fostering effective teacher collaboration due to limited resources and varying levels of teacher commitment. Similarly, Bautista and Baniqued (2021) discuss the shift from competition to collaboration among teachers in the context of Lesson Study in the Philippines, emphasizing the struggle to maintain sustained collaborative efforts amidst a competitive culture ingrained in many schools. Both studies underscore the need for stronger administrative support and a cultural shift towards collaboration to enhance the effectiveness of school improvement initiatives. These findings reflect broader issues in Asia, where hierarchical structures and resource constraints often impede genuine collaborative efforts among educators.

Despite the increasing recognition of the importance of teacher persistence in educational settings, there remains a notable research gap in quantitatively examining how this trait directly impacts teacher collaboration and the broader scope of school improvement initiatives, particularly in regions like Lupon West District in Davao Oriental. Existing research mainly examines qualitative aspects or general correlations, lacking an in-depth analysis of how teacher persistence specifically fosters collaboration and school-wide reforms. The unique socio-cultural and educational context of Lupon West District requires a targeted investigation to fully understand and utilize the benefits of persistent teaching behaviors. Without such a focused study, educational stakeholders may miss crucial data needed to design effective interventions that enhance teacher collaboration and drive sustainable school improvements.

The urgency to conduct this study stems from the ongoing challenges faced by schools in maintaining high levels of teacher engagement and implementing effective improvement strategies. In regions like Lupon West District, where resources are limited and educational demands are high, teacher persistence plays a vital role in driving and maintaining reform efforts. A quantitative analysis using regression could offer valuable insights into how teachers' enduring commitment influences collaboration and the success of improvement initiatives. This study aims to fill a knowledge gap by providing empirical evidence to inform policy decisions and professional development programs, ultimately leading to more effective educational practices that boost teacher morale and enhance student learning outcomes across the district.

REVIEW OF SIGNIFICANT LITERATURE

This section presents an exploration of the variable and its indicators, incorporating discussions of concepts, ideas, and perspectives from various authors. The insights were drawn from a diverse range of sources, including books, journals, and electronic publications.

Teacher Persistence

Teacher persistence as defined by Demir and Yildirim Doner (2019) is the sustained commitment and resilience that educators exhibit in their professional roles, particularly in the face of challenges and obstacles. It involves continuous effort, adaptability, and a dedication to student success, regardless of difficulties encountered in the teaching environment. According to Mott (2020), persistent teachers are more likely to engage in reflective practices, seek professional

development, and implement innovative strategies to enhance student learning. Also, Fabelico and Afalla's (2020) study explores the relationship between teachers' grit, self-efficacy, burnout, and performance, emphasizing that perseverance and passion are key factors in sustaining teaching effectiveness. In the context of moderate levels of teacher persistence, the study suggests that maintaining a balanced level of persistence can help teachers stay resilient and perform well without leading to burnout.

Teacher persistence is a crucial factor in the success and longevity of a teaching career. High levels of persistence enable educators to navigate the challenges of the profession, such as managing diverse classrooms, adapting to curriculum changes, and addressing the varying needs of students (Medeiros, 2019). According to Zubeidat and Dallasheh (2024), teachers who demonstrate persistence are more likely to experience job satisfaction and professional fulfillment, as they are better equipped to handle setbacks and continue pursuing their teaching goals. Persistent teachers are more likely to stay in the profession long-term, contributing to greater stability and continuity in schools. This continuity is vital for fostering strong relationships with students and colleagues, which are essential components of an effective educational environment.

High levels of teacher persistence also play a significant role in student outcomes. Teachers who persist in their efforts to improve instructional practices are more likely to implement innovative teaching strategies and interventions that meet the diverse learning needs of their students (Pearman et al., 2020). Also, research by Murdoch and Lim (2022) indicates that persistent teachers are more adept at overcoming barriers to student learning, such as lack of resources or challenging student behaviors, leading to higher student achievement and engagement. Persistent teachers serve as role models for their students, demonstrating the value of perseverance and hard work. This modeling can inspire students to adopt similar attitudes towards their own learning, contributing to a positive classroom culture.

In the broader context of educational management, teacher persistence is linked to the overall success and improvement of schools. Persistent teachers are often leaders in their schools, driving school improvement initiatives and contributing to a culture of continuous professional development (Jaruševičiūtė, 2019). Accordingly, schools with a high proportion of persistent teachers are more likely to implement and sustain effective educational reforms. This is because persistent teachers are committed to long-term goals and are willing to invest the necessary time and effort to achieve them. Consequently, high levels of teacher persistence are not only beneficial for individual careers but also for the broader educational system, promoting sustained improvement and innovation in teaching practices (Myles, 2022).

Meanwhile, the relationship between teacher persistence and teacher collaboration is critical for fostering a productive and supportive educational environment. Persistent teachers, who consistently strive to overcome challenges, are more likely to engage in collaborative efforts with their colleagues, as they recognize the value of shared knowledge and resources in achieving common goals (Saks et al., 2022). According to Kolleck et al. (2021), teachers who exhibit high levels of persistence are often the driving force behind successful collaborative initiatives, as their determination inspires others to participate and contribute. Persistent teachers tend to seek out collaboration as a means to enhance their own teaching practices and support their peers, leading to a more cohesive and effective teaching community. This synergy between persistence and collaboration ultimately leads to improved instructional practices and better student outcomes.

Moreover, research suggests that teacher collaboration can also reinforce persistence by providing a network of support and shared accountability among educators. Guo and Wang (2021) highlight that when teachers work together regularly, they are better equipped to navigate the challenges of the profession, thus sustaining their persistence over time. Collaborative environments foster a culture of mutual encouragement, where teachers are more likely to persevere through difficulties knowing that they have the backing of their colleagues. According to Bilal (2022), this reciprocal relationship between persistence and collaboration creates a positive feedback loop, where persistence drives collaboration, and collaboration, in turn, bolsters persistence. As a result, schools that promote both persistence and collaboration among teachers tend to experience higher levels of teacher satisfaction and student achievement.

On a different view, the relationship between teacher persistence and school improvement initiatives is integral to the success of educational reforms and overall school effectiveness. Persistent teachers are often more resilient and committed to overcoming challenges, which enables them to consistently contribute to school improvement efforts. According to Yurkofsky et al. (2020), teachers who demonstrate high levels of persistence are more likely to engage in and sustain school improvement initiatives, even when faced with obstacles such as limited resources or resistance to change. Their unwavering commitment helps drive the continuous implementation of strategies that enhance student learning and overall school performance. Moreover, Yalçınkaya et al. (2021) noted that this persistence is crucial in maintaining the momentum of long-term improvement projects, ensuring that initiatives are carried through to completion.

Research also suggests that teacher persistence positively influences the collaborative culture necessary for successful school improvement. As noted by Hallinger, Heck, and Murphy (2014), persistent teachers are more likely to inspire their colleagues to participate in school-wide initiatives, fostering a collective effort towards achieving shared educational goals.

This collaborative environment, supported by persistent leadership, is essential for addressing complex educational challenges and implementing effective solutions. Additionally, Bellei et al. (2020) proposed that the persistence of teachers in these initiatives has been shown to increase the likelihood of sustained improvements, as they are more dedicated to evaluating and refining practices over time.

STATEMENT OF THE PROBLEM

The purpose of this study was to determine the impact of teacher persistence on the teacher collaboration and school improvement initiatives in Lupon West District, Davao Oriental. Specifically, this study seek to answer the following questions:

1. What is the extent of teacher persistence in terms of:
    1.1 consistent effort;
    1.2 resilience in adversity;
    1.3 commitment to professional growth; and
    1.4 dedication to student success?
2. What is the extent of teacher collaboration in terms of:
    2.1 active participation in team meetings;
    2.2 willingness to share resources and best practices; and
    2.3 constructive feedback and support?
3. What is the extent of school improvement initiatives in terms of:
    3.1 active participation in professional development;
    3.2 collaboration in curriculum development; and
    3.3 initiating and leading school-wide projects?
4. Is there a significant relationship between:
    4.1 teacher persistence and teacher collaboration?; and
    4.2 teacher persistence and school improvement initiatives.
5. Do teacher persistence significantly predict teacher collaboration and school improvement initiatives?

METHODOLOGY

This section contains the research design, research respondents, research instrument, data gathering procedure, and data analysis.

Research Design

In this study, the researcher employed a quantitative research approach, specifically utilizing the descriptive-correlational-comparative technique to gather and analyze relevant data. According to Bacon-Shone (2013), a quantitative approach involved the systematic collection and analysis of numerical data to identify patterns, relationships, and causal connections between variables. In the context of studying teacher persistence as a predictor of teacher collaboration and school improvement initiatives, using a quantitative approach allowed researchers to measure the levels of persistence, collaboration, and school improvement objectively. This approach enabled the identification of statistically significant correlations and predictions based on measurable data. Using surveys or structured questionnaires, researchers collected data from a large teacher sample, ensuring generalizable results across various educational contexts. Its relevance lay in providing empirical evidence to inform educational policies and practices that enhance teacher collaboration and drive school improvement.

Moreover, the descriptive research method involved systematically describing a phenomenon by collecting data that provided a clear picture of the variables in question, without manipulating them (Taherdoost, 2022). In the context of this study, this method was particularly relevant as it allowed researchers to observe and document the existing levels of teacher persistence, collaboration, and involvement in school improvement efforts. Descriptive research was crucial for identifying patterns and relationships between teacher persistence, collaborative practices, and school initiatives. It captured natural behaviors and attitudes, offering insights that informed further research or interventions. This method provided a foundational understanding of the factors that contributed to effective collaboration and school improvement driven by teacher persistence.

In addition, a correlational research design was useful in examining the relationship between two or more variables, determining whether and how strongly they were related (Hassan, 2024). In the context of studying "Teacher Persistence as a Predictor of Teacher Collaboration and School Improvement Initiatives," this design was relevant because it allowed researchers to assess the strength and direction of the relationship between teacher persistence and the outcomes of collaboration and school improvement. By using correlational analysis, the study identified whether higher levels of teacher persistence were associated with increased collaboration among teachers and more effective school improvement initiatives, without manipulating any variables.

Research Respondents

The study sampled 254 elementary school teachers from the Lupon West District in the Division of Davao Oriental. To obtain a sample of 254 teachers from a population of approximately 760 elementary school teachers in Lupon West District, Davao Oriental using the Raosoft calculator, the researcher set the margin of error at 5%, a confidence level of 95%, and a response distribution of 50%. These parameters ensured that the sample size was representative and statistically significant. The researcher then employed random sampling to ensure that every teacher had an equal chance of being selected. This process involved creating a list of all 760 teachers and using a random number generator to select the required 254 respondents. Before data collection, the researcher sought approval from relevant authorities and ensured that all participants provided informed consent, adhering to ethical guidelines.

Simple random sampling was a technique where each individual in the population had an equal chance of being selected, ensuring that the sample was unbiased and representative. This method involved randomly choosing participants from a larger group, typically using a random number generator or lottery system (Tipton, 2013). In this study, simple random sampling was appropriate because it ensured that every teacher had an equal opportunity to be included in the sample. This reduced potential bias and allowed for a more accurate representation of the broader teaching population, leading to more reliable and generalizable findings about the relationship between teacher persistence, collaboration, and school improvement efforts.

In this study, certain inclusion criteria were implemented in determining the respondents. Respondents had to be currently employed as full-time teachers in one of the four schools within the Lupon West District. They were required to have a minimum of one year of teaching experience at their current school to ensure they had had sufficient time to engage in both collaborative activities and school improvement initiatives. Teachers also must have participated in at least one school improvement initiative or collaborative effort within the past academic year, as this experience was critical for assessing the relationship between persistence, collaboration, and school improvement. Additionally, respondents needed to be willing to provide informed consent to participate in the study, ensuring they fully understood the research purpose and their role in it. This set of criteria helped ensure that the selected teachers had relevant experience and were well-positioned to provide meaningful insights into the study's objectives.

Research Instrument

The study employed three questionnaires that fit the context of the respondents. The first part of the instrument focused on teacher persistence. This questionnaire was developed by Demir and Yildirim Doner (2019) and was measured in terms of consistent effort, resilience in adversity, commitment to professional growth, and dedication to student success. The Cronbach alpha value for this questionnaire is 0.922, described as excellent and interpreted as highly reliable and consistent. In responding to the questionnaire, the respondents used a 5-point Likert scale. As a guide in determining the extent of teacher persistence, the researcher utilized the range of means, descriptions, and interpretations as presented below:

Data Analysis

The following are the statistical tools that were utilized by the researcher in processing the gathered data:

Weighted Mean

This was useful in determining extents of teacher persistence, collaboration, and school improvement initiatives, allowing for the comparison of average levels.

Pearson Moment Product Correlation

This was employed to measure the strength and direction of the relationship between teacher persistence, teacher collaboration, and school improvement initiatives.

Regression Analysis

It was conducted to determine the predictive power of teacher persistence on teacher collaboration and school improvement initiatives.

RESULTS AND DISCUSSIONS

This chapter presents the results generated from the data gathered. It is sequenced based on the objectives of the study as presented in the first chapter. Thus, it presents the extents of teacher persistence, teacher collaboration and school improvement initiatives; the significant relationship among these variables; and the influence of teacher persistence on the teacher collaboration and school improvement initiatives in Lupon West District, Davao Oriental.

Teacher Persistence

Teacher persistence in Lupon West District, Davao Oriental is measured in terms of consistent effort, resilience in adversity, commitment to professional growth, and dedication to student success. The extent of this variable and its domains are presented on Tables 1-5.

Consistent Effort

On Table 1, results indicate that teacher persistence in terms of consistent effort is generally rated as moderately extensive, with an overall mean of 3.32. This rating suggests that while teachers sometimes maintain persistence in their instructional responsibilities, there is still room for improving the consistency and depth of effort, particularly in innovative and student-centered practices. As highlighted by Burton (2021), persistence, often associated with grit, is essential for sustained teacher effectiveness, especially in challenging educational contexts. Likewise, Wang et al. (2021) emphasized that consistent instructional effort contributes to student success and teacher professional growth, particularly when supported by reflective and adaptive practices. The moderately extensive rating implies that while persistence is present, institutional support and capacity-building may further enhance teachers' sustained engagement.

The range of means for the specific statements varies from 3.19 to 3.44, showing slight but meaningful variation in how specific aspects of persistent effort are demonstrated. The highest-rated item is Maintaining a high level of effort in daily teaching tasks, rated as extensive with a mean of 3.44. In contrast, the lowest-rated item is Persistently applying innovative teaching strategies in the classroom, with a mean of 3.19. As noted by Habte (2019), innovation in teaching requires not only creativity but also sustained effort and support systems to be effectively applied.

CONCLUSIONS AND RECOMMENDATIONS

This part of the paper presents the conclusion and recommendation of the researcher. The discussion is supported by the literature presented in the first chapters and the conclusion is in accordance with statements of the problem presented in this study.

The primary objective of this study was to evaluate the influence of teacher persistence on teacher collaboration and school improvement initiatives utilizing non-experimental quantitative design using descriptive-correlation technique. The researcher selected the 254 public elementary school teachers Lupon West District, Daavao Oriental as the respondents through simple random sampling method. The researcher made use of modified and enhanced adapted survey questionnaires which was pilot tested in a nearby school to ensure high reliability and internal consistency of the items in the instrument. The result of the study are summarize as follows:

Teacher teacher persistence is generally at a moderately extensive level. Among the indicators, commitment to professional growth emerges as extensive, while consistent effort, resilience in adversity, and dedication to student success are all rated moderately extensive. This suggests that while teachers show professional growth engagement, their day-to-day persistence and student-focused dedication vary in consistency.

Teacher collaboration in Lupon West District is found to be moderately extensive overall. Willingness to share resources and active participation in team meetings are moderately extensive, while constructive feedback and support is also within the same range, though slightly lower. These results indicate that collaboration practices are present but require further institutionalization for full effectiveness.

The extent of school improvement initiatives is described as extensive. Teachers demonstrate strong engagement in initiating and leading school-wide projects and in curriculum collaboration, while participation in professional development, though present, is moderately extensive. These findings affirm that teachers are generally proactive in institutional reforms but may benefit from strengthened support in ongoing capacity building.

The analysis shows a significant and positive relationship between teacher persistence and teacher collaboration. Among the indicators, all dimensions of persistence, consistent effort, resilience, professional growth, and student dedication, are significantly associated with collaboration, with professional growth showing the strongest connection. This indicates that persistent teachers are more inclined to contribute meaningfully to collaborative practices in schools.

Teacher persistence significantly predicts engagement in school improvement initiatives. Commitment to professional growth demonstrates the strongest relationship, followed by dedication to student success, resilience, and consistent effort. These findings underscore the importance of sustained teacher dedication in fostering effective and continuous school development.

Regression results reveal that teacher persistence is a strong predictor of both teacher collaboration and school improvement initiatives. The model confirms statistically significant influence, with collaboration and improvement both increasing as persistence rises. These findings align with resilience, social interdependence, and organizational change theories, confirming that persistent teachers drive both interpersonal collaboration and systemic reform.

Conclusions

Based on the findings of this study several conclusions were generated: Teacher persistence is moderately demonstrated, with evident strength in commitment to professional growth. However, consistent effort, resilience in adversity, and dedication to student success are only moderately extensive, indicating variability in sustained engagement and adaptive

practices. Schools should prioritize professional development and mentoring programs that cultivate resilience and day-to-day perseverance, fostering a more consistent and enduring commitment to teaching excellence.

Teacher collaboration is moderately practiced, with notable strengths in resource-sharing and participation in team meetings. However, constructive feedback and support remain underutilized, suggesting the need for a more reflective and open feedback culture. Institutional efforts should prioritize capacity-building in peer dialogue and collegial support to strengthen collaborative teaching.

School improvement initiatives are extensively demonstrated, particularly in leading projects and collaborative curriculum work. Participation in professional development, though present, lags slightly behind, indicating an area for growth. Encouraging more consistent involvement in capacity-building activities will enhance the sustainability of improvement initiatives.

A significant positive relationship exists between teacher persistence and teacher collaboration, especially in relation to professional growth and student-centered commitment. Teachers who demonstrate sustained effort are more likely to engage in team-based practices and collegial learning. This reinforces the importance of cultivating persistence to support a culture of mutual accountability and collaboration.

Teacher persistence significantly correlated with school improvement initiatives, with professional growth and dedication to student success emerging as key contributors. These findings highlight that resilient and committed educators play a crucial role in driving institutional change. Leadership efforts should prioritize strategies that promote teacher agency and long-term engagement in reform efforts.

Teacher persistence proves to be a strong predictor of both collaboration and school improvement, with significant implications for instructional practice and school leadership. The result confirms Garmezy's (1961) Resilience Theory, as it highlights the role of persistence in overcoming adversity; supports Johnson, Roger, and Johnson's (1983) Social Interdependence Theory, by linking persistence to collaborative engagement; and aligns with Lewin's (1947) Organizational Change Theory, by showing that persistent individuals drive and sustain meaningful school transformation.

Recommendations

School Heads. School heads may provide tailored mentoring and coaching programs to strengthen consistent effort and resilience in adversity among teachers. These areas reflect challenges in sustaining day-to-day instructional persistence and adapting to difficulties, which are essential for long-term professional success. By institutionalizing support systems and recognizing teacher effort, schools can cultivate a more resilient and development-focused teaching workforce.

Moreover, school heads may initiate targeted interventions to boost consistent effort and adaptability among teachers, as these indicators showed relatively weaker influence on school improvement initiatives. This includes promoting manageable workloads, goal-setting strategies, and recognition of incremental progress. Strengthening these traits can help ensure more uniform teacher engagement in school-wide reform programs.

Teachers. Teachers are encouraged to strengthen their practice of offering and receiving constructive feedback to enhance peer learning and professional support. This area remains underutilized, indicating the need for a more open and trusting collaborative culture. Teachers can benefit from professional learning communities that promote shared reflection, collective problem-solving, and recognition of achievements.

DepEd Officials. DepEd officials can develop division-wide incentive programs that motivate active participation in professional development, particularly among schools with lower engagement levels. This initiative can address the lag in professional development compared to other improvement activities such as project leadership and curriculum collaboration. Providing recognition and resources will encourage teachers to pursue continuous learning that aligns with broader school improvement goals.

Adding more, DepEd officials may integrate resilience and collaboration training into professional development programs to maximize the impact of teacher persistence on institutional performance. Although persistence significantly predicts outcomes, the unexplained variance highlights the need to address other complementary factors. Policies that support a holistic approach to teacher capacity-building can reinforce the sustainability of both collaboration and school improvement efforts.

Future Researchers. Future researchers may explore other contributing factors such as leadership styles, organizational trust, and peer dynamics to better understand their impact on teacher collaboration. While teacher persistence has a significant relationship with collaboration, the moderate strength of this link suggests additional variables at play. Future

studies can provide deeper insight into how different contextual influences interact to shape collaborative behavior among educators.

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